

DAWN Moves to Status Yellow

Submitted by **mkavaya** on Sat, 08/14/2010 - 14:15

- **DAWN**

Flight Date:

Friday, August 13, 2010

Sortie Number:

N/A

On the Aug. 10 test flight, DAWN saw returns from the surface, clouds, and occasional aerosols near the DC-8. We were expecting full profiles of wind to the ground. There are two issues being worked in parallel.

1. The pulsed laser performance is changing with the temperature and pressure outside the LEOS optics can, with the settings of 2 laser and 1 can chiller, and with the pressure in the sealed optics can. Either the laser is fine and we must figure out the best settings, or the laser has 1 or more problems.

2. The Pacific Ocean aerosols are known to be very low. Either DAWN has problems or it worked as expected in very clean air. DAWN was operated on the Aug. 13 transit flight, and it did see more aerosols when the laser was performing well. The issue is whether DAWN has alignment problems, or the results seen are simply due to not understanding the best settings for the laser and low aerosol levels during the test flight.

The decision to deintegrate, repair, and integrate depends on issue 2 above. We are investigating both issues. We have shipped our trailer to Fort Lauderdale and if we need to repair, we will do it in the clean room in the trailer.

Michael Kavaya

Status:

Yellow